U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

70342

SEARCH REQUEST FORM

10/036652

Requestor's Name: NEIL LEVY

Serial Number: PCT/02/38287

Date: 2/11/03

Phone: 3082412

3E01

Art Unit: 1616

2D19

Search Topic: SDL-gel, films on Hard ...

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevent citations, authors, keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevent claim(s).

L1 = Please search claim 1; if no K. pneumoniae, ~~any bacteria~~ try Klebsiella; if no hits, any bacteria

L2 = L1 + claim 6

L3 = (L1 or L2) + Basic pH or caustic + heat

L4 = claim 24

L5 = ~~24 or~~ (L1 or L2 or L3 or L4) ~~+ claim 24~~

L6 = L5 + claim 34

L7 = (L5 or L6) + claim 36

L8 = (L5 or L6 or L7) + claim 40

Point of Contact
P. Sheppard
Telephone number: (703) 308-4499

STAFF USE ONLY

Date completed:		**Search Site**		**Vendors**	
Searcher:			STIC		IG
Terminal time:			CM-1		STN
Elapsed time:			Pre-S		Dialog
CPU time:		**Type of Search**			APS
Total time:			N.A. Sequence		Geninfo
Number of Searches:			A.A. Sequence		SDC
Number of Databases:			Structure		DARC/Questel
			Bibliographic		Other

```
=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 14:02:56 ON 03 MAR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)
```



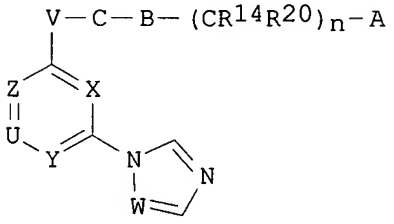
```
FILE COVERS 1907 - 3 Mar 2003  VOL 138 ISS 10
FILE LAST UPDATED: 2 Mar 2003  (20030302/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


=>
=>

=> d stat que l6
L1        21687 SEA FILE=HCAPLUS ABB=ON  PLU=ON  PNEUMONIA OR KLEBSIELLA
L4            3 SEA FILE=REGISTRY ABB=ON  PLU=ON  SOL(W)GEL OR SOLGEL?
L5        36498 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L4 OR SOL(W)GEL OR SOLGEL?
L6            9 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 AND L5


=>
=>

=> d ibib abs hitrn l6 1-9

L6   ANSWER 1 OF 9  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2002:610405  HCAPLUS
DOCUMENT NUMBER:          137:169534
TITLE:                    Preparation of imidazolyl pyrimidinamines as NOS
                          inhibitors
INVENTOR(S):              Arnaiz, Damian O.; Baldwin, John J.; Davey, David D.;
                          Devlin, James J.; Dolle, Roland Ellwood, III;
                          Erickson, Shawn David; McMillan, Kirk; Morrissey,
                          Michael M.; Ohlmeyer, Michael H. J.; Pan, Gonghua;
                          Paradkar, Vidyadhar Madhav; Parkinson, John; Phillips,
                          Gary B.; Ye, Bin; Zhao, Zuchun
PATENT ASSIGNEE(S):       Berlex Laboratories, Inc., USA; Pharmacopeia, Inc.
SOURCE:                   U.S., 132 pp., Cont.-in-part of U.S. Ser. No. 25,124,
                          abandoned.
                          CODEN: USXXAM
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   3
PATENT INFORMATION:

     PATENT NO.        KIND  DATE          APPLICATION NO.  DATE
     ---------------   ----  --------      ---------------  --------
     US 6432947         B1   20020813      US 1999-383813   19990826
     WO 2001014371      A1   20010301      WO 2000-US23173  20000824
```

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

BR 2000014144	A	20020521	BR 2000-14144	20000824	
EP 1206467	A1	20020522	EP 2000-959333	20000824	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL					
NO 2002000925	A	20020416	NO 2002-925	20020226	
LT 4982	B	20030127	LT 2002-28	20020315	
US 2002165203	A1	20021107	US 2002-121886	20020412	
US 2002183323	A1	20021205	US 2002-121659	20020412	
US 2003004137	A1	20030102	US 2002-121379	20020412	
US 2003027794	A1	20030206	US 2002-121758	20020412	

PRIORITY APPLN. INFO.:	US 1997-808975	B2	19970219
	US 1998-25124	B2	19980217
	WO 1998-US3176	A	19980219
	US 1999-383813	A1	19990826
	WO 2000-US23173	W	20000824

OTHER SOURCE(S): MARPAT 137:169534
GI



I

AB The title compds. [I; U = N, CR5 (R5 = H, halo, alkyl, optionally substituted aralkyl or aryl, etc.); V = NR4, S, O, CHR4 (R4 = H, alkyl, aryl, aralkyl, cycloalkyl); W = N, CH; X, Y, Z = N, CR19 (R19 = H, alkyl, cyclopropyl, halo, haloalkyl); A = R1, OR1, CONR1R2, PO(NR1R2)2, NR1COR2, etc. (R1, R2 = H, optionally substituted alkyl or cycloalkyl, etc. or NR1R2 = N-heterocyclyl); B = CR17(CHR15)mQR3 (m = 1-4, R3 = H, alkyl, cycloalkyl, optionally substituted aryl, etc.; R15, R17 = H, alkyl; Q = CO, O, C:NR1, etc.); C = (CHR12)q(CHR13)r (q, r = 0-1; R12, R13 = H, alkyl); or B = C = null; R14, R20 = H, alkyl; n = 1-3], useful as inhibitors of nitric oxide synthase, were prepd. Thus, N-[(1,3-benzodioxol-5-yl)methyl]-1-[3-(1H-imidazol-1-yl)phenyl]piperidine-2-acetamide was prepd. by reaction of 1-(3-aminophenyl)imidazole, Et 7-chloro-3-oxoheptanoate, and piperonylamine. All exemplified compds. I showed iNOS inhibitory activity at concns. less than 25 .mu.M.

IT **108-77-0**, Cyanuric chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of imidazolyl pyrimidinamines as NOS inhibitors)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:350993 HCAPLUS

DOCUMENT NUMBER: 136:55109
TITLE: Antimicrobial treatment of liner fabrics with allylamine copolymer
AUTHOR(S): Kim, Yoon Jeong; Yoon, Nam Sik
CORPORATE SOURCE: Department of Dyeing and Finishing, Kyungpook National University, Taegu, 702-701, S. Korea
SOURCE: Journal of the Korean Fiber Society (2001), 38(3), 135-143
CODEN: HSKCDQ; ISSN: 1225-1089
PUBLISHER: Korean Fiber Society
DOCUMENT TYPE: Journal
LANGUAGE: Korean

AB Liner is usually used to prevent see-through of outer cloths and to improve slipperiness of the cloths and appearance of garment. Although liner should have basic characteristics such as air permeability, antistatic property, and dimensional stability during wear or cleaning, the demand for antimicrobial property is increasing recently for sanitary clothing environment. We tried to impart antimicrobial properties to liners by treating with cellulose-reactive allylamine polymer which is prepd. in our lab. Regenerated cellulose and its blends were treated with the antimicrobial polymer via typical pad-curing method. Acetates were partially sapond. by sodium hydroxide to generate cellulose hydroxyl group and then treated with the polymer. The antimicrobial properties of the liners and their fastness to laundering were evaluated by shake flask test.

IT **108-77-0D**, Cyanuric chloride, reaction products with diallylamine-diallyldimethylammonium chloride
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)
(antimicrobial treatment of liner fabrics with allylamine copolymer)

L6 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:80937 HCAPLUS
DOCUMENT NUMBER: 134:204489
TITLE: **Sol-gel** as reaction matrix for bacterial enzymatic activity
AUTHOR(S): Armon, R.; Starosvetzky, J.; Saad, I.
CORPORATE SOURCE: Faculty of Civil Engineering, Environmental & Water Resources Engineering, Technion, Israel Institute of Technology, Haifa, 32000, Israel
SOURCE: Journal of Sol-Gel Science and Technology (2000), 19(1/2/3), 289-292
CODEN: JSGTEC; ISSN: 0928-0707
PUBLISHER: Kluwer Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English

AB **Sol-gel** process is a rapid growing field in material chem. The **sol-gel** matrixes (SGM) are basically porous wet-gels or xerogels obtained by the hydrolysis and condensation-polymn. of metal and semimetal alkoxides, mainly SiO2 materials. The current study presents the uses of **sol-gel** glass matrix (SGM) that allow direct entrapment of biomols. within and at surface, which can be utilized by microorganisms. This glass type is solid, transparent, porous and can be modulated to form a hydrophobic or hydrophilic surface. In view of all these beneficial characteristics of SGM, preliminary data is presented on biofilm formed on thin films of SGM doped with a fluorochrome (fluorescein diacetate). The esterase/lipase activity of E. coli CN13 and K. oxytoca spp. biofilm grown on top of SGM thin film, doped with fluorescein diacetate, was detected at the level of a single cell by epifluorescence microscopy. In view of these preliminary results, **sol-gel** glass has a considerable potential as a variable matrix for single bacteria and biofilm investigation.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:799669 HCAPLUS
DOCUMENT NUMBER: 130:43352
TITLE: Treatment of infected tissues liposome compositions containing hydrophilic polymers
INVENTOR(S): Woodle, Martin C.; Bakker-Woudenberg, Irma Ajm; Martin, Francis J.
PATENT ASSIGNEE(S): SEQUUS Pharmaceuticals, Inc., USA
SOURCE: U.S., 39 pp., Cont.-in-part of U.S. 5,213,804.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 9
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5843473	A	19981201	US 1992-858171	19920327
US 5013556	A	19910507	US 1989-425224	19891020
AU 9066374	A1	19910516	AU 1990-66374	19901019
AU 642679	B2	19931028		
EP 496813	A1	19920805	EP 1990-916409	19901019
EP 496813	B1	19941214		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 05505173	T2	19930805	JP 1990-515238	19901019
JP 2001181214	A2	20010703	JP 2001-4291	19901019
US 5213804	A	19930525	US 1991-642321	19910115
NO 9201213	A	19920604	NO 1992-1213	19920327
FI 9201763	A	19920421	FI 1992-1763	19920421
WO 9319738	A1	19931014	WO 1993-US2808	19930324
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 632719	A1	19950111	EP 1993-908585	19930324
EP 632719	B1	19960911		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AT 142483	E	19960915	AT 1993-908585	19930324
ES 2092296	T3	19961116	ES 1993-908585	19930324
JP 10001431	A2	19980106	JP 1997-63661	19970317
JP 2889549	B2	19990510		
US 2001051183	A1	20011213	US 2001-843578	20010426

PRIORITY APPLN. INFO.:

US 1989-425224	A2	19891020
US 1991-642321	A2	19910115
JP 1990-515238	A3	19901019
JP 1991-501034	A3	19901019
WO 1990-US6034	A	19901019
US 1992-858171	A	19920327
WO 1993-US2808	W	19930324
US 1998-139058	A2	19980824
US 1998-174298	A1	19981016

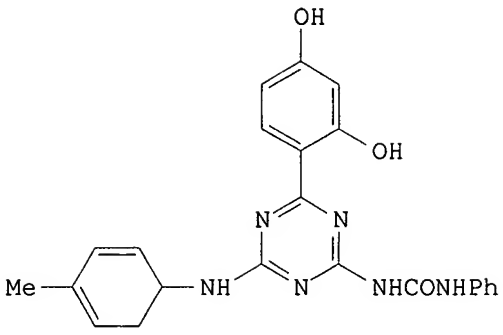
AB A method of treating a site of systemic infection which includes administering a therapeutic compd. entrapped in liposomes. Also included is a liposomal compn. and a method of prepg. a liposomal compn. for use in concg. a therapeutic compd. to an infected region via the bloodstream. The liposomes, which contain the agent in entrapped form, are composed of vesicle-forming lipids, a vesicle-forming lipid derivatized with hydrophilic biocompatible polymer, and have sizes in a selected size range between 0.07 and 0.2 .mu.. After parenteral administration, the liposomes are selectively taken up by the infected region within 24-48 h, for release of entrapped compd. into the infected region. Thus, methoxyPEG was derivatized with DSPE by using linkers, and liposomes were formulated with this compd, phospholipids and cholesterol.

IT **108-77-0**

RL: RCT (Reactant); RACT (Reactant or reagent)
(treatment of infected tissues with liposome compns. contg. hydrophilic polymers)
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:57550 HCAPLUS
DOCUMENT NUMBER: 128:168999
TITLE: New alkylamide type cationic surfactants from arginine
AUTHOR(S): Piera, Eulalia; Comelles, Francisco; Erra, Pilar; Infante, Ma Rosa
CORPORATE SOURCE: (CSIC), CID, Department of Surfactant Technology, Barcelona, 08034, Spain
SOURCE: Journal of the Chemical Society, Perkin Transactions 2: Physical Organic Chemistry (1998), (2), 335-342
CODEN: JCPKBH; ISSN: 0300-9580
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The synthesis, stability, surface activity, and antimicrobial properties of a new family of cationic surfactants (the long chain arginylalkylamide dihydrochloride salts) derived from the condensation of the amino acid arginine and a long chain alkylamine are described. The surface active parameters reported are c.m.c. (crit. micellar concn.), pC20 (neg. log of the surfactant molar concn. required to reduce the surface tension of the solvent by 20 mN m-1), .gamma.c.m.c. (the surface tension at the c.m.c.), .GAMMA.max (the max. surface excess concn.) and Amin (the min. area per surfactant mol. at the interface). These data and those obtained from the evaluation of the antimicrobial properties are compared with the data corresponding to another family of cationic surfactants reported earlier: the long chain N-.alpha.-acylarginine Me ester salts. Moreover, the synthesis of analogs possessing a reactive group capable of bonding to wool or cotton fibers is described: the long chain N-.alpha.-dichlorotriazinylarginylalkylamide monohydrochloride salts. These compds. are expected to bond to the textile substrate by the formation of a covalent bond. Confirmation of this is, however, necessary.
IT **108-77-0**, 2,4,6-Trichloro-1,3,5-triazine
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; alkylamide type cationic surfactants from arginine and their stability, surface activity, and antimicrobial properties)
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:580741 HCAPLUS
DOCUMENT NUMBER: 119:180741
TITLE: Synthesis of heterocyclic compounds: 2-arylureido-4-(p-methylanilino)-6-(2',4'-dihydroxy-1'-phenyl)-s-triazine
AUTHOR(S): Patel, H. M.; Desai, K. R.
CORPORATE SOURCE: Chem. Dep., South Gujarat Univ., Surat, 395 007, India
SOURCE: Journal of the Institution of Chemists (India) (1992), 64(3), 101-2
CODEN: JOICA7; ISSN: 0020-3254
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

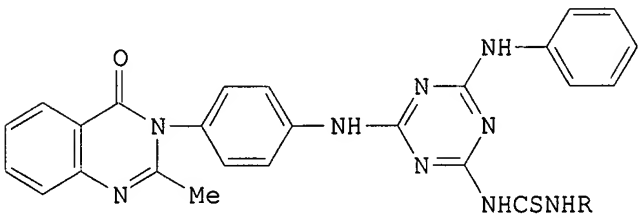


I

AB Title compds., e.g. I, were prepd. and tested for their antibacterial activity against E. coli, S. aureus, and **Klebsiella.**

IT **108-77-0,** Cyanuric chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with resorcinol)

L6 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1992:41418 HCAPLUS
DOCUMENT NUMBER: 116:41418
TITLE: Synthesis and antimicrobial activities of some 2-(phenylamino)-4-(arylthioureido)-6-[4-(2-methylquinazol-4-on-3-yl)phenylamino]-s-triazines
AUTHOR(S): Patel, Hiren M.; Desai, Kishor R.
CORPORATE SOURCE: Dep. Chem., South Gujarat Univ., Surat, 395 007, India
SOURCE: Indian Journal of Heterocyclic Chemistry (1991), 1(1), 43-6
CODEN: IJCHEI; ISSN: 0971-1627
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB The title compds. I (R = Ph, substituted Ph) were prepd. in 49-77% yields, as potential bactericides, in 6 steps starting from N-acetylanthranilic acid. I showed insignificant activity against Staphyllococcus aureus and **Klebsiella.**

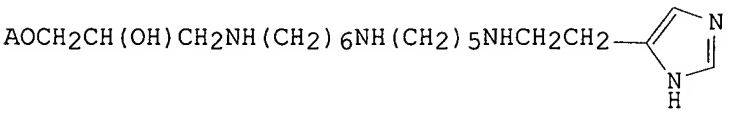
IT **108-77-0,** Cyanuric chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(substitution by, of (aminophenyl)methylquinazolinone)

L6 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1983:149634 HCAPLUS
DOCUMENT NUMBER: 98:149634
TITLE: Removing pyrogen-containing substances
INVENTOR(S): Chibata, Ichiro; Tosa, Tetsuya; Sato, Tadashi; Watanabe, Taizo; Minobe, Satoshi

PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan
SOURCE: Ger. Offen., 74 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3204544	A1	19820902	DE 1982-3204544	19820210
DE 3204544	C2	19900712		
US 4381239	A	19830426	US 1982-343269	19820127
SE 8200715	A	19820811	SE 1982-715	19820208
SE 461505	B	19900226		
SE 461505	C	19900621		
JP 57183712	A2	19821112	JP 1982-19509	19820208
JP 02014325	B4	19900406		
FR 2499429	A1	19820813	FR 1982-2042	19820209
FR 2499429	B1	19871002		
GB 2092470	A	19820818	GB 1982-3689	19820209
GB 2092470	B2	19840718		
JP 63118301	A2	19880523	JP 1987-43595	19870225
JP 03007681	B4	19910204		

PRIORITY APPLN. INFO.: GB 1981-3972 19810210
GI



I, A=agarose

AB Pyrogens are removed from solns. or other pyrogen-contg. materials by an adsorbent comprising a H2O-insol. carrier such as a cellulose deriv. bound to a N-contg. heterocyclic ligand, either directly or through a spacer group. Sepharose CL-4B was treated with epicholohydrin to give epoxy-Sepharose CL-4B which was treated with H2N(CH2)6NH2 to give aminohexyl Sepharose CL-4B. This was treated with glutaraldehyde and then with histamine and the product redued with NaBH4 to give I [84991-87-7]. The effectiveness of I was tested in a column in which various pyrogens (from Escherichia coli, Klehsiella **pneumonia**, and a no. of Salmmella) (100.mu.g pyrogen/100 mL 0.05 M NaCl) were washed through the column and pyrogen content deceased to 0-0.6 ng/mL eluant which was mg to the Limulus test.

IT **108-77-0DP**, reaction products with divinylbenzene-styrene copolymer and histamine
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as adsorbents for pyrogen removal)

L6 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1968:504755 HCAPLUS
DOCUMENT NUMBER: 69:104755
TITLE: Toxicity of cyanuric chloride [2,4,6-trichloro-s-triazine]
AUTHOR(S): Blagodatin, V. M.
CORPORATE SOURCE: Inst. Gig. Tr. Profzabol., Gorki, USSR
SOURCE: Gigiena Truda i Professional'nye Zabolevaniya (1968), 12(8), 35-9
CODEN: GTPZAB; ISSN: 0016-9919
DOCUMENT TYPE: Journal

LANGUAGE: Russian
AB After inhalation of cyanuric chloride (I) at 3, 6, 8, 12, 30, and 50 mg./m.3 for 2 hrs., the mean lethal concn. for albino mice was 10 mg./m.3 Lethal doses after the peroral administration of I were LD16 = 205, LD50 = 350, and LD84 = 590 mg./kg. in mice, and LD16 = 301, LD50 = 485, and LD84 = 590 mg./kg. in rats. The threshold concn. causing disturbances of the central nervous system in mice was 0.6 mg./m.3 Prolonged inhalation of I at 1.88 mg./m.3 (4 hrs. a day for 2.5 months) resulted in the death of 30% rats, decreased body wt., O consumption, and body temp., and in changes in blood compn. Bronchitis, interstitial **pneumonia**, and dystrophic changes in the liver, kidney, and myocardium were observed. Prolonged inhalation of I at 0.3 mg./m.3 did not cause any significant effect in rats. Administration of I (200 mg./kg.) on the skin of rabbits resulted in local irritation, but no resorption of I was observed. The threshold irritation effect of I inhaled by human volunteers for 1 min. was 0.3 mg./m.3 A max. permissible concn. of I in the air of 0.1 mg./m.3 is recommended.
IT **108-77-0**
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (toxicity of, after inhalation and topical application)

=> select hit rn l6 1-9
E1 THROUGH E1 ASSIGNED

=> fil reg
FILE 'REGISTRY' ENTERED AT 14:03:41 ON 03 MAR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 28 FEB 2003 HIGHEST RN 496269-39-7
DICTIONARY FILE UPDATES: 28 FEB 2003 HIGHEST RN 496269-39-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=>
=>

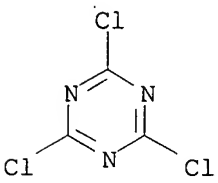
=> s e1
L7 1 108-77-0/BI
(108-77-0/RN)

=>
=>

=> d ide can l7 1

L7 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
RN **108-77-0** REGISTRY

CN 1,3,5-Triazine, 2,4,6-trichloro- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN s-Triazine, 2,4,6-trichloro- (8CI)
OTHER NAMES:
CN 1,3,5-Trichloro-2,4,6-triazine
CN 1,3,5-Trichlorotriazine
CN 2,4,6-Trichloro-1,3,5-triazine
CN 2,4,6-Trichloro-s-triazine
CN 2,4,6-Trichloro-sym-triazine
CN 2,4,6-Trichlorotriazine
CN Cyanur chloride
CN Cyanuric chloride
CN Cyanuric trichloride
CN Cyanuryl chloride
CN Isocyanuric trichloride
CN s-Triazine trichloride
CN Solgel W 08
CN sym-Trichlorotriazine
CN Trichloro-s-triazine
CN Trichlorocyanidine
CN Zorugeru W 08
FS 3D CONCORD
DR 190086-22-7
MF C3 Cl3 N3
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DETHERM*, EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4409 REFERENCES IN FILE CA (1962 TO DATE)
307 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
4412 REFERENCES IN FILE CAPLUS (1962 TO DATE)
63 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:138767

REFERENCE 2: 138:132617

REFERENCE 3: 138:128921

REFERENCE 4: 138:108569

REFERENCE 5: 138:107892

REFERENCE 6: 138:107643

REFERENCE 7: 138:102301

REFERENCE 8: 138:91393

REFERENCE 9: 138:89624

REFERENCE 10: 138:78455

```
=> d stat que l13
L1        21687 SEA FILE=HCAPLUS ABB=ON  PLU=ON  PNEUMONIA OR KLEBSIELLA
L4            3 SEA FILE=REGISTRY ABB=ON  PLU=ON  SOL(W)GEL OR SOLGEL?
L5        36498 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L4 OR SOL(W)GEL OR SOLGEL?
L6            9 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 AND L5
L12           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 AND LOG(W)KILL
L13           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L12 NOT L6


=>
=>

=> d ibib abs hitrn l13 1-2

L13  ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2002:688567  HCAPLUS
DOCUMENT NUMBER:          137:202526
TITLE:                    Sulfur-free antimicrobial articles from vulcanized
                          nitrile or natural rubber containing silver-based
                          antimicrobial agents
INVENTOR(S):              Lever, John G.; Haas, Geoffrey R.; Patel, Bhawan;
                          Burke, William O., III; Kerr, Robert C.
PATENT ASSIGNEE(S):       Milliken & Company, USA
SOURCE:                   U.S., 8 pp.
                          CODEN: USXXAM
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   3
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
     US 6448306         B1   20020910       US 2001-815637   20010323
     WO 2002077095      A2   20021003       WO 2002-US6422   20020301
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:                  US 2001-815637   A  20010323
                                        US 2001-815730   A  20010323
                                        US 2001-815483   A  20010326
AB   A dimensionally stable vulcanized rubber article comprises at least
     majority of a rubber constituent selected from nitrile rubber, natural
     rubber and their mixts., and at least one silver-based antimicrobial
     agent, with the rubber article exhibiting log kill
     rates in accordance with the AATCC Draft Method "Assessment of
     Antimicrobial Properties on Hydrophobic Textiles and Solid Substrates" for
     Staphylococcus aureus and Klebsiella pneumoniae of at least 1.0
     each after 24 h of exposure at room temp.  The article may optionally
     comprise at least one silver ion control release additive in addn. to the
     silver-based antimicrobial agent.  The rubber formulations are vulcanized
     to provide solid or foam rubber articles, and utilization of sulfur-free
     vulcanization catalysts and agents according to the invention permits
     vulcanization of the rubber and silver stability for long-term
     antimicrobial performance of the silver-based compds.  Thus, a nitrile
     rubber-based compn. was produced which contained a silver-based
     antimicrobial agent (1%), silver ion-exchanged zirconium phosphate salts
```

with silver ion concn. of 3.8% (Alphasan ion exchange resin), silica (40), stearic acid (1) and dioctyl phthalate (3 phr) as silver ion control release additives, and other components. The compn. was vulcanized in temp. range 150 to 250.degree. and tested for antimicrobial activity against Staphylococcus aureus and **Klebsiella** pneumoniae.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:48762 HCAPLUS
DOCUMENT NUMBER: 135:86575
TITLE: Comparative activity of cefodizime and ceftriaxone against respiratory pathogens in an in vitro pharmacodynamic model simulating concentration-time curves
AUTHOR(S): Blandino, G.; Milazzo, I.; Musumecl, R.; Nicolosi, V. M.; Speciale, A.; Nicoletti, G.
CORPORATE SOURCE: Department of Microbiological and Gynecological Sciences, University of Catania, Italy
SOURCE: Journal of Chemotherapy (Firenze) (2000), 12(6), 503-508
CODEN: JCHEEU; ISSN: 1120-009X
PUBLISHER: E.I.F.T. srl
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The duration of time that serum levels are above the min. inhibitory concn. (MIC; T >MIC) seems to be an important pharmacodynamic parameter for beta-lactams. The aim of this study was to evaluate the bactericidal activity of cefodizime and ceftriaxone in a pharmacokinetic model mimicking the concns. in bronchial mucus and in serum (total and free) obtained at 2, 4, 8, 12 and 24 h, after 1 g i.m. administration once daily. The species investigated were respiratory pathogens (1 strain of Staphylococcus aureus, 2 strains of Streptococcus pneumoniae, 1 strain b-lactamase neg. and 1 strain .beta.-lactamase pos. of Haemophilus influenzae, 1 strain of Escherichia coli and 1 strain of **Klebsiella** pneumoniae); MIC50s of the chosen strains were reported. In this in vitro model the concns. (serum and bronchial mucus) for both antibiotics are generally at or above the MIC values of the tested strains until 24 h. The killing curve showed rapid killing for both antibiotics: 99.9% killing (a 3-log redn. in growth) within 6 to 8 h, depending upon the microorganism tested. There was no significant difference in the **log kill** between cefodizime and ceftriaxone. These data confirm that T >MIC for beta-lactams is the pharmacodynamic parameter which best correlates with bactericidal efficacy. On the basis of the killing curve detd. for cefodizime vs. ceftriaxone at concns. that these antibiotics can reach during therapy with 1 g i.m. once daily we expect reasonable clin. efficacy with monoadministration of cefodizime as well as for ceftriaxone in respiratory tract infections.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 14:12:05 ON 03 MAR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)


Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
the American Chemical Society and is provided to assist you in searching
databases on STN.  Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.

FILE COVERS 1907 - 3 Mar 2003  VOL 138 ISS 10
FILE LAST UPDATED: 2 Mar 2003  (20030302/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


=>
=>

=> d stat que
L1        21687 SEA FILE=HCAPLUS ABB=ON  PLU=ON  PNEUMONIA OR KLEBSIELLA
L4            3 SEA FILE=REGISTRY ABB=ON  PLU=ON  SOL(W)GEL OR SOLGEL?
L5        36498 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L4 OR SOL(W)GEL OR SOLGEL?
L6            9 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 AND L5
L12           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 AND LOG(W)KILL
L13           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L12 NOT L6
L14         328 SEA FILE=HCAPLUS ABB=ON  PLU=ON  KILL(5A)RATE
L15          15 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L14 AND L1
L16          14 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L15 NOT (L6 OR L13)


=>
=>

=> d ibib abs hitrn l16 1-14

L16  ANSWER 1 OF 14  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2000:364984  HCAPLUS
DOCUMENT NUMBER:          133:101881
TITLE:                    Time-kill studies of tea tree oils on clinical
                          isolates
AUTHOR(S):                May, J.; Chan, C. H.; King, A.; Williams, L.; French,
                          G. L.
CORPORATE SOURCE:         Microbiology Department, St Thomas' Hospital, London,
                          SE1 7EH, UK
SOURCE:                   Journal of Antimicrobial Chemotherapy (2000), 45(5),
                          639-643
                          CODEN: JACHDX; ISSN: 0305-7453
PUBLISHER:                Oxford University Press
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
AB   Tea tree oil has recently emerged as an effective topical antimicrobial
     agent active against a wide range of organisms.  Tea tree oil may have a
     clin. application in both the hospital and community, esp. for clearance
```

of methicillin-resistant Staphylococcus aureus (MRSA) carriage or as a hand disinfectant to prevent cross-infection with Gram-pos. and Gram-neg. epidemic organisms. Our study, based on the time-**kill** approach, detd. the **kill rate** of tea tree oil against several multidrug-resistant organisms, including MRSA, glycopeptide-resistant enterococci, aminoglycoside-resistant klebsiellae, Pseudomonas aeruginosa and Stenotrophomonas maltophilia, and also against sensitive microorganisms. The study was performed with two chem. different tea tree oils. One was a std. oil and the other was Clone 88 extd. from a specially bred tree, which has been selected and bred for increased activity and decreased skin irritation. Our results confirm that the cloned oil had increased antimicrobial activity when compared with the std. oil. Most results indicated that the susceptibility pattern and Gram reaction of the organism did not influence the **kill rate** . A rapid killing time (less than 60 min) was achieved with both tea tree oils with most isolates, but MRSA was killed more slowly than other organisms.

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 2 OF 14 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:640966 HCAPLUS
DOCUMENT NUMBER: 119:240966
TITLE: Ex vivo pharmacodynamic study of piperacillin alone and in combination with tazobactam, compared with ticarcillin plus clavulanic acid
AUTHOR(S): Van der Auwera, P.; Duchateau, V.; Lambert, C.; Husson, M.; Kinzig, M.; Sorgel, F.
CORPORATE SOURCE: Inst. Jules Bordet, Univ. Libre Bruxelles, Brussels, 1000, Belg.
SOURCE: Antimicrobial Agents and Chemotherapy (1993), 37(9), 1860-8
CODEN: AMACCQ; ISSN: 0066-4804
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Ten volunteers received piperacillin (4 g), piperacillin (4 g) plus tazobactam (0.5 g) (Tazocin), and ticarcillin (3 g) plus clavulanic acid (0.2 g) (Timentin) i.v. over 30 min in a cross-over blinded scheme. Blood samples were obtained 0.5 and 3 h after the end of infusion to measure by (high-pressure liq. chromatog.) the construction and bactericidal titers against 70 gram-neg. bacilli. Serum time-kill curves were done against 35 strains to measure killing **rates** and area under the time-**kill** curve. Using the measure of serum bactericidal activity, ticarcillin-clavulanic acid and piperacillin-tazobactam were equally effective against Pseudomonas aeruginosa, Escherichia coli, Enterobacter cloacae, Serratia marcescens, and Bacteroides fragilis. Piperacillin-tazobactam was superior to ticarcillin-clavulanic acid against piperacillin-resistant **Klebsiella** pneumoniae (4 to 16 times) and S. marcescens (2 to 4 times). By using the area under the time-kill curve, piperacillin-tazobactam was equiv. to ticarcillin-clavulanic acid against pipercillin-susceptible strains; piperacillin-tazobactam was significantly more active than piperacillin against piperacillin-resistant strains and was more active than ticarcillin-clavulanic acid when the sample obtained 3 h after the end of infusion to volunteers was considered. Serum piperacillin concns. (mg/L) were 115 at 0.5 h and 7.4 at 3 h after the administration of piperacillin alone and 105.5 (0.5 h) and 7.7 after the administration of piperacillin-tazobactam. Serum tazobactam concns. (in mg/L) were 13.1 at 0.5 h and 1.2 at 3 h. The piperacillin-tazobactam ratio was 8 at 0.5 h and 6.2 at 3 h. Piperacillin-tazobactam appears promising against .beta.-lactamase-producing gram-neg. bacilli.

L16 ANSWER 3 OF 14 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1992:542928 HCAPLUS
DOCUMENT NUMBER: 117:142928
TITLE: Cefonicid potentiation of human macrophage activity
AUTHOR(S): Tullio, V.; Cuffini, A. M.; Fazari, S.; Carlone, N. A.
CORPORATE SOURCE: Inst. Microbiol., Univ. Turin, Turin, 10126, Italy
SOURCE: Microbiologica (1992), 15(3), 219-26
CODEN: MIBLDR; ISSN: 0391-5352
DOCUMENT TYPE: Journal
LANGUAGE: English
AB At concns. half the min. inhibitory concn. (MIC), cefonicid caused human macrophages to ingest and **kill Klebsiella** pneumoniae at a greater **rate** than did drug-free macrophages. Bacteria pretreated with subinhibitory concns. of cefonicid became more susceptible to the phagocytic and bactericidal activity of the macrophages than untreated microorganisms. Sub-MIC cefonicid pretreatment of macrophages did not reduce phagocytosis and killing, confirming the inability of .beta.-lactam antibiotics to cross the cell membrane.

L16 ANSWER 4 OF 14 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:15872 HCAPLUS
DOCUMENT NUMBER: 108:15872
TITLE: Comparative activities of ciprofloxacin and ceftazidime against **Klebsiella** pneumoniae in vitro and in experimental **pneumonia** in leukopenic rats
AUTHOR(S): Roosendaal, Robert; Bakker-Woudenberg, Irma A. J. M.; Van den Berghe-Van Raffe, Marion; Vink-Van den Berg, Joke C.; Michel, Marc F.
CORPORATE SOURCE: Dep. Clin. Microbiol. Antimicrob. Ther., Erasmus Univ., Rotterdam, 3000, Neth.
SOURCE: Antimicrobial Agents and Chemotherapy (1987), 31(11), 1809-15
CODEN: AMACCQ; ISSN: 0066-4804
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The antibacterial activities of ciprofloxacin and ceftazidime against K. pneumoniae in vitro and in vivo were compared. Although there was only a minor difference between the min. bactericidal concns. of both drugs, the bacterial killing rate of ciprofloxacin in vitro was very fast in comparison with that of ceftazidime. Similarly, the i.v. administration of ciprofloxacin 1 h after bacterial inoculation resulted in effective bacterial killing in the lungs of leukopenic rats. This killing was dose-dependent, in contrast to the dose-independent bactericidal effect of ceftazidime. The high antibacterial activity of ciprofloxacin in the lungs as compared with that of ceftazidime was also reflected in its therapeutic efficacy in K. pneumoniae **pneumonia** and septicemia in leukopenic rats when these infections were treated at 6-h intervals over 4 days, starting 5 h after bacterial inoculation. Concns. of ciprofloxacin and ceftazidime in the lungs were not different. Both in vitro and in the lungs of leukopenic rats, ciprofloxacin killed K. pneumoniae organisms that were not actively growing, whereas ceftazidime did not. In addn., when the i.v. administration of antibiotic was delayed from 1 h until .ltoreq.24 h after bacterial inoculation, ceftazidime lost its antibacterial activity in the lungs and blood of leukopenic rats, whereas ciprofloxacin was still very effective. The ability of an antibiotic to **kill** bacteria with a slow growth **rate** may be relevant for its therapeutic effect in established infections, in which slowly growing bacteria form a substantial part of the total bacterial population.

L16 ANSWER 5 OF 14 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1987:2759 HCAPLUS
DOCUMENT NUMBER: 106:2759

TITLE: Bactericidal activity of ofloxacin in human blood
AUTHOR(S): Shah, P. M.; Juettner, C.
CORPORATE SOURCE: Zent. Inn. Med., Johann-Wolfgang-Goethe-Univ., Frankfurt, Fed. Rep. Ger.
SOURCE: Recent Adv. Chemother., Proc. Int. Congr. Chemother., 14th (1985), Issue Antimicrobial Sect. 2, 1759-60. Editor(s): Ishigami, Joji. Univ. Tokyo Press: Tokyo, Japan.
CODEN: 55GNAX
DOCUMENT TYPE: Conference
LANGUAGE: English
AB In vitro activity of ofloxacin was studied in a model simulating pharmacokinetic parameters in human blood. The concn. rose slowly from 0.00 to 2.32 mg/L at the 3rd hour and then dropped gradually to below 0.12 mg/L at the 12th hour. Under these conditions ofloxacin was rapidly bactericidal against Escherichia coli, **Klebsiella** penumoniae and Pseudomonas aeruginosa. Mean time required to achieve a 99.9% **kill rate** against E. coli, K. pneumoniae, and P. aeruginosa was 50, 68, and 196 min, resp.

L16 ANSWER 6 OF 14 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1987:2753 HCAPLUS
DOCUMENT NUMBER: 106:2753
TITLE: Bactericidal activity of cefodizime under conditions simulating serum pharmacokinetic parameters
AUTHOR(S): Shah, P. M.
CORPORATE SOURCE: Zent. Inn. Med., Johann Wolfgang Goethe-Univ., Frankfurt, Fed. Rep. Ger.
SOURCE: Recent Adv. Chemother., Proc. Int. Congr. Chemother., 14th (1985), Issue Antimicrobial Sect. 2, 935-6. Editor(s): Ishigami, Joji. Univ. Tokyo Press: Tokyo, Japan.
CODEN: 55GNAX
DOCUMENT TYPE: Conference
LANGUAGE: English
AB In vitro activity of cefodizime was studied in a mode stimulating pharmacokinetic parameters. The initial concn. was 200 mg/L and the half-life was 150 min. Under these conditions, cefodizime was rapidly bactericidal against Escherichia coli, **Klebsiella** pneumoniae, Enterobacter, and Citrobacter species. The 99.0% **kill rate** was achieved in 59, 111, and 42 min, resp. E. coli Failed to recover from the antibacterial effect during the 1st 12 h and only 3 of 6 strains recovered by the 24th h. Long lasting effect was also seen against K. pneumoniae, Enterobacter, and Citrobacter species.

L16 ANSWER 7 OF 14 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1986:622587 HCAPLUS
DOCUMENT NUMBER: 105:222587
TITLE: In vitro bactericidal activity of clavulanate/ticarcillin combinations
AUTHOR(S): Gould, I. M.; Dent, J.; Wise, R.
CORPORATE SOURCE: Dep. Microbiol., Dudley Road Hosp., Birmingham, UK
SOURCE: Recent Adv. Chemother., Proc. Int. Congr. Chemother., 14th (1985), Issue Antimicrobial Sect. 2, 1308-9. Editor(s): Ishigami, Joji. Univ. Tokyo Press: Tokyo, Japan.
CODEN: 55GNAX
DOCUMENT TYPE: Conference
LANGUAGE: English
AB In-vitro **rate** of **kill** was detd. for various organisms to ticarcillin-clavulanate combinations. Each organism has a different time and concn.-dependent response to calvulanate exposure. The results suggest that to obtain optimal bactericidal effects of

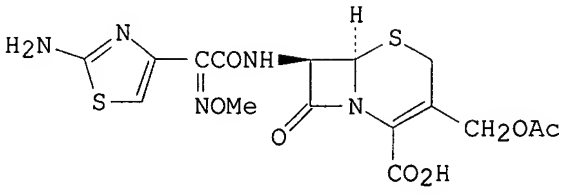
ticarcillin-clavulanate combinations higher doses of clavulanate, than are currently used, might be necessary in certain circumstances.

L16 ANSWER 8 OF 14 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1984:469225 HCAPLUS
DOCUMENT NUMBER: 101:69225
TITLE: Comparative antibacterial effects of amoxycillin/Augmentin and cefotaxime against Enterobacteriaceae as determined by turbidimetry, morphology and **rate** of **kill**
AUTHOR(S): Wilson, J. M.; Hunter, P. A.
CORPORATE SOURCE: Res. Div., Beecham Pharm., Betchworth, UK
SOURCE: Chemioterapia (1983), 2(5, Suppl.: Mediterr. Congr. Chemother., Proc., 3rd, 1982), 112-13
CODEN: CHEMEV; ISSN: 0392-906X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Addn. of amoxycillin (10 .mu.g/mL) to non-.beta.-lactamase-producing Escherichia coli resulted in an almost immediate decrease in turbidity of the culture. A similar rapid response to Augmentin was obsd. with .beta.-lactamase-producing E. coli. In contrast, cefotaxime at 2-5 .times. min. inhibitory concn. (0.1 .mu.g/mL) had no effect. Amoxycillin and Augmentin produced rapid lysis of the culture whereas cefotaxime induced filamentation. The antibacterial effect of cefotaxime was close to that of amoxycillin and Augmentin when the inhibitory concn. of cefotaxime was raised 100-fold.

L16 ANSWER 9 OF 14 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1984:99728 HCAPLUS
DOCUMENT NUMBER: 100:99728
TITLE: Antibacterial activity and kill kinetics of amoxicillin-clavulanic acid combinations against Escherichia coli and **Klebsiella** aerogenes
AUTHOR(S): Fuglesang, J. E.; Bergan, T.
CORPORATE SOURCE: Vaccine Dep., Natl. Inst. Public Health, Oslo, Norway
SOURCE: Infection (Munich, Germany) (1983), 11(6), 329-35
CODEN: IFTNAL; ISSN: 0300-8126
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Combinations of amoxicillin and clavulanic acid were tested against 11 E. coli strains and 5 K. aerogenes strains. Apart from 1 E. coli, the strains were highly resistant to amoxicillin due to .beta.-lactamase prodn. Synergy was demonstrated in all strains by agar diln. Synergy was detected against the .beta.-lactamase-producing strains under simulated in vivo conditions, with constantly decreasing concns. simulating in vivo pharmacokinetics. The correlation between antibacterial activity detd. by min. inhibitory concns. and bacterial kill kinetics in the in vivo simulation model was acceptable. A higher bacterial **kill rate** was obsd. when the antibiotic dosage was increased beyond the min. concn. where an antibacterial effect was seen; this was not demonstrable by traditional agar diln. tests. In combination, a greater relative amt. of amoxicillin compared to clavulanic acid allows a redn. in the total amt. of antimicrobial agents with the same degree of antibacterial activity.

L16 ANSWER 10 OF 14 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1979:551929 HCAPLUS
DOCUMENT NUMBER: 91:151929
TITLE: Effect of concentration on bactericidal activity of cefotaxime
AUTHOR(S): Shah, Pramod M.; Troche, Gudrun; Stille, W.
CORPORATE SOURCE: Zent. Inn. Med., J. W. Goethe Univ., Frankfurt/Main, Fed. Rep. Ger.

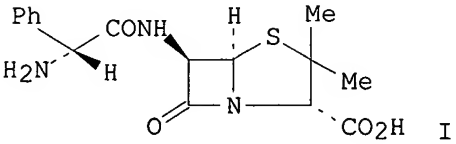
SOURCE: Journal of Antimicrobial Chemotherapy (1979), 5(4), 419-22
CODEN: JACHDX; ISSN: 0305-7453
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB The effect of concn. on bactericidal activity of cefotaxime (I) [63527-52-6] against Escherichia coli, **Klebsiella** penumoniae, Pseudomonas aeruginosa, Proteus species, and Staphylococcus aureus was evaluated via membrane filtration technique. Although I is a cephalosporin deriv., its bactericidal activity was similar to that of penicillin: higher concns. either do not lead to higher **kill-rate** (against Gram-neg. rods) or there was a decrease in **kill-rate** (against S. aureus).

L16 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1979:162191 HCAPLUS
DOCUMENT NUMBER: 90:162191
TITLE: Comparative activities of ampicillin, epicillin and amoxycillin in vitro and in vivo
AUTHOR(S): Basker, M. J.; Gwynn, M. N.; White, A. R.
CORPORATE SOURCE: Res. Div., Beecham Pharm., Betchworth/Surrey, UK
SOURCE: Chemotherapy (Basel, Switzerland) (1979), 25(3), 170-80
CODEN: CHTHBK; ISSN: 0009-3157
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

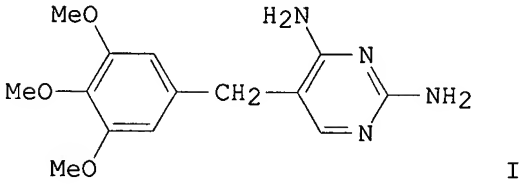


I

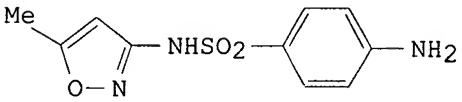
AB The antibacterial activities of 3 aminopenicillins ampicillin (I) [69-53-4], epicillin [26774-90-3], and amoxycillin [26787-78-0] were compared in vitro and in vivo. The minimal inhibitory concns. (MIC) of the 3 penicillins were very similar, and all were active against non-.beta.-lactamase-producing strains of Escherichia coli, Salmonella, Shigella, Proteus mirabilis, Haemophilus influenzae, and Neisseria gonorrhoeae. Streptococci including Streptococcus faecalis, and non-.beta.-lactamase-producing staphylococci were also sensitive to compds. but Pseudomonas aeruginosa, **Klebsiella** aerogenes, Enterobacter, and indole-pos. Proteus species were resistant. At concns. close to MIC value, epicillin and I had similar bactericidal activity against E. coli and against Salmonella typhi; both compds. caused a slower **rate** of **kill** than was seen with amoxycillin.

Microscopical observation of the cells exposed to I and epicillin for 1 h showed the presence of filamentous forms which lysed slowly, whereas cells exposed to amoxycillin for the same period lysed rapidly. Epicillin was similar to or slightly less active than I against exptl. mouse infections, and against the majority of infections both compds. were significantly less effective than amoxycillin by the oral s.c. routes of administration.

L16 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1979:34461 HCAPLUS
DOCUMENT NUMBER: 90:34461
TITLE: Synergy between trimethoprim and sulfamethoxazole against Enterobacteriaceae
AUTHOR(S): Knothe, H.
CORPORATE SOURCE: Hyg.-Inst., Univ. Frankfurt, Frankfurt/Main, Fed. Rep. Ger.
SOURCE: Infection (Munich, Germany) (1978), 6(Suppl. 1), 29-32
CODEN: IFTNAL; ISSN: 0300-8126
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



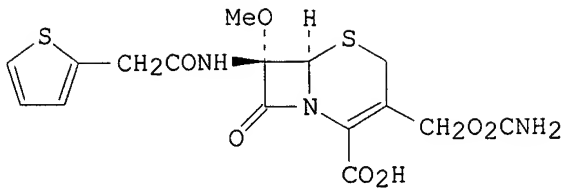
I



II

AB The kinetics of synergism and bactericidal action of trimethoprim (I) [738-70-5] and sulfamethoxazole (II) [723-46-6] against Escherichia coli were tested by means of viable count expts. With stationary phase cells, synergism of I and II and bactericidal effects were obsd. only at low cell counts. Whereas log phase cells were more sensitive to the combination of drugs and were killed at high cell counts too. The efficacy of I was more dependent on the cell count than was II. Apparently, the **kill rate** from the synergism between I and II depends on the cell age and cell count.

L16 ANSWER 13 OF 14 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1978:485194 HCAPLUS
DOCUMENT NUMBER: 89:85194
TITLE: Bactericidal activity of cefoxitin and cefuroxime
AUTHOR(S): Shah, Pramod M.; Bender, Hanno
CORPORATE SOURCE: Zent. Inn. Med., Universitaetsklin., Frankfurt/Main, Fed. Rep. Ger.
SOURCE: Journal of Antimicrobial Chemotherapy (1978), 4(2), 163-8
CODEN: JACHDX; ISSN: 0305-7453
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB Using the membrane filtration method the bactericidal activity of cefoxitin (I) [35607-66-0] and cefuroxime [55268-75-2] was detd. against Escherichia coli, **Klebsiella** pneumoniae, and Proteus mirabilis. No significant difference in the rate of killing was seen between the 2 compds., and the min. inhibitory concn. of the strains tested had no effect on the bactericidal activity. At 10 .mu.g/mL both I and cefuroxime rapidly decreased the viable count. The effect of concn. on **kill -rate** was evaluated against 1 strain of E. coli, K. pneumoniae, P. mirabilis, and P. morganii. At an exposure time of 2 h, higher concns. led to a greater decrease in the viable count.

L16 ANSWER 14 OF 14 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1977:115588 HCAPLUS
DOCUMENT NUMBER: 86:115588
TITLE: Bactericidal activity of amikacin and gentamicin
AUTHOR(S): Shah, Pramod M.; Heetderks, G.; Stille, W.
CORPORATE SOURCE: Zent. Inn. Med., Johann-Wolfgang-Goethe-Univ., Frankfurt/Main, Fed. Rep. Ger.
SOURCE: Chemotherapy (Basel, Switzerland) (1977), 23(4), 223-9
CODEN: CHTHBK; ISSN: 0009-3157
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Using the membrane filtration method bactericidal activity of amikacin (I) [37517-28-5] and gentamicin [1403-66-3] as a function of time and concns. was detd. Amikacin was bactericidal against all Pseudomonas aeruginosa and **Klebsiella** pneumoniae strains tested. In 5 of the 7 P. aeruginosa and 3 of the 8 K. pneumoniae strains there was secondary regrowth at 24 h. There was no difference between amikacin and gentamicin. Higher concns. of the antibiotics lead to a faster **kill rate**.

```
=>
=> d stat que
L1        21687 SEA FILE=HCAPLUS ABB=ON  PLU=ON  PNEUMONIA OR KLEBSIELLA
L4            3 SEA FILE=REGISTRY ABB=ON  PLU=ON  SOL(W)GEL OR SOLGEL?
L5        36498 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L4 OR SOL(W)GEL OR SOLGEL?
L6            9 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 AND L5
L12           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 AND LOG(W)KILL
L13           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L12 NOT L6
L17         218 SEA FILE=HCAPLUS ABB=ON  PLU=ON  PLATE(W)CONTACT
L18           0 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L17 AND L1) NOT (L6 OR L13)


=> d stat que
L1        21687 SEA FILE=HCAPLUS ABB=ON  PLU=ON  PNEUMONIA OR KLEBSIELLA
L4            3 SEA FILE=REGISTRY ABB=ON  PLU=ON  SOL(W)GEL OR SOLGEL?
L5        36498 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L4 OR SOL(W)GEL OR SOLGEL?
L6            9 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 AND L5
L12           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 AND LOG(W)KILL
L13           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L12 NOT L6
```

L19 26 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND ((BASIC OR LOW)(W)PH OR CAUSTIC)
L20 2 SEA FILE=HCAPLUS ABB=ON PLU=ON (L19 AND HEAT) NOT (L6 OR L13)

=> d ibib abs hitrn l20 1-2

L20 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:287161 HCAPLUS
DOCUMENT NUMBER: 135:89703
TITLE: Detection and characterization of a bacteriocin, garviecin L1-5, produced by Lactococcus garvieae isolated from raw cow's milk
AUTHOR(S): Villani, F.; Aponte, M.; Blaiotta, G.; Mauriello, G.; Pepe, O.; Moschetti, G.
CORPORATE SOURCE: Dipartimento di Scienza degli Alimenti, Sezione di Microbiologia Agraria, Alimentare ed Ambientale e di lgiene, Universita degli Studi di Napoli "Federico II", Portici, I 80055, Italy
SOURCE: Journal of Applied Microbiology (2001), 90(3), 430-439
CODEN: JAMIFK; ISSN: 1364-5072
PUBLISHER: Blackwell Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The identification of a bacteriocin-producing lactococcal strain isolated from raw cow's milk is reported, along with prodn. conditions, phys. and chem. properties, and mode of action of the bacteriocin. On the basis of resistance to clindamycin, species-specific PCR and amplification of the 16S-23S rDNA spacer region, the strain was identified as Lactococcus garvieae. Its bacteriocin, designated garviecin L1-5, was bactericidal against closely related species and strains of species from different genera, including Listeria monocytogenes and Clostridium spp. Garviecin L1-5 was shown to be proteinaceous by protease inactivation and was unaffected by **heat** treatments, also at **low pH** values. When amplifying known lactococcal bacteriocin genes using DNA from strain L1-5 as template, no amplification products were obsd. on the agarose gel. The mol. wt. of garviecin L1-5 was about 2.5 kDa. As far as is known, no bacteriocins have been detected from Lactococcus garvieae. The general properties of garviecin L1-5 are characteristic of the low-mol.-wt. bactericidal peptide group. The survey of micro-organisms for novel antimicrobial substances provided valuable information on their physiol., ecol. and practical application.
REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1965:470840 HCAPLUS
DOCUMENT NUMBER: 63:70840
ORIGINAL REFERENCE NO.: 63:12970f-h
TITLE: Isolation and characterization of a new antibiotic, enteromycincarboxamide
AUTHOR(S): DeVoe, S. E.; McCrae, W.; Mitscher, L. A.
CORPORATE SOURCE: Am. Cyanamid Co., Pearl River, NY
SOURCE: Antimicrobial Agents Chemotherapy (1964) 105-9
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Enteromycincarboxamide [MeON(O):CHCONHCH:CHCONH2] (I), a new broadspectrum antibiotic was isolated from the fermentation broth of an unidentified species of Streptomyces. The filtered fermentation broth was stirred with Magnesol (Mg. silicate). The bulk of the antibiotic was adsorbed and after filtration was eluted by stirring with 90% aq. acetone. Concn. of this eluate to an aq. phase pptd. an amorphous brown solid. About 20.0 g.

of this crude material could be obtained from a 300-l. fermentation. After crystn., the solids were dissolved in hot HOAc and, on cooling, I crystd. as small white rosettes. Because of **heat** instability, poor recoveries of cryst. material were usually obtained. I is sol. in HOAc, Me2SO, and HCONMe2, and it is slightly sol. in MeOH. It is relatively insol. in H2O, acetone, ether, and petr. ether. I is relatively stable at acidic or neutral pH at room temp. but is **heat**-labile at any pH. Stability is also less at **basic pH**. The uv and ir are given. In vivo testing revealed that the compd. was ineffective in protecting mice from lethal exptl. bacterial infections of all organisms tested, e.g., Streptococcus pyogenes, Staphylococcus aureus, Escherichia colis Aerobacter aerogenes, **Klebsiella** pneumoniae, Mycobacterium tuberculosis, and others.

```
=> d stat que
L1        21687 SEA FILE=HCAPLUS ABB=ON  PLU=ON  PNEUMONIA OR KLEBSIELLA
L4            3 SEA FILE=REGISTRY ABB=ON  PLU=ON  SOL(W)GEL OR SOLGEL?
L5        36498 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L4 OR SOL(W)GEL OR SOLGEL?
L6            9 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 AND L5
L12           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 AND LOG(W)KILL
L13           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L12 NOT L6
L14         328 SEA FILE=HCAPLUS ABB=ON  PLU=ON  KILL(5A)RATE
L15          15 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L14 AND L1
L16          14 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L15 NOT (L6 OR L13)
L19          26 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 AND ((BASIC OR LOW)(W)PH
                OR CAUSTIC)
L20           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L19 AND HEAT) NOT (L6 OR
                L13)
L21      180549 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (METAL OR SILVER OR AG)(W)(CON
                TAIN? OR OXIDE) OR METAL(L)(GLASS? OR SULFADIAZINE OR ZEOLITE?)

L22      180549 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L21 OR (METAL OR SILVER OR
                AG)(W)(CONTAIN? OR OXIDE) OR METAL(L)(GLASS? OR SULFADIAZINE
                OR ZEOLITE?)
L23        2327 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L22(L)(?MICROB? OR ?BACTE? OR
                DISINFEC?)
L24          12 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L23 AND L1
L25          10 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L24 NOT (L6 OR L13 OR L16 OR
                L20)


=>
=>

=> d ibib abs hitrn l25 1-10

L25  ANSWER 1 OF 10  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:        2003:69670  HCAPLUS
TITLE:                   Effect of metal oxides on the growth, hemolytic and
                         serological properties of Klebsiella
                         pneumoniae
AUTHOR(S):               Aleksakhina, N. N.; Miryasova, L. V.; Basnakyan, I. A.
CORPORATE SOURCE:        Mechnikov Res. Inst. Vaccines Sera, Moscow, Russia
SOURCE:                  Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii
                         (2002), (6), 13-18
                         CODEN: ZMEIAV; ISSN: 0372-9311
PUBLISHER:               S-info
DOCUMENT TYPE:           Journal
LANGUAGE:                Russian
AB   Silicon, dysprosium, germanium, yttrium, iron, cobalt, samarium, lutecium
     oxides, as well as the mixt. of 8 metal oxides, at a
     concn. of 20 g/l were found to produce a stimulating or inhibiting effect
     on the growth of K. pneumoniae strains 204 and K-9.  Silicon, dysprosium,
     germanium and yttrium oxides were shown to stimulate the growth of K.
     pneumoniae strain 204.  Iron, cobalt, samarium and lutecium oxides, as
     well as the mixts. of all oxides under study, inhibited the growth of this
     strain.  Silicon, samarium and lutecium oxides produced no effect on the
     growth of K. pneumoniae strain K-9; at the same time germanium and yttrium
     oxides stimulated the growth of these bacteria, while
     dysprosium, iron, cobalt oxides, as well as the mixt. of all oxides,
     inhibited their growth.  The presence of metal oxides
     did not change the serol. activity of the cultures of both strains growing
     old, i.e. by 24 h of their growth.  The addn. of silicon, germanium and
     iron oxides to the culture medium increased the hemolytic activity of K.
     pneumoniae strain K-9 seven to ninefold in comparison with the control
     grown in a synthetic nutrient medium without metal
```

oxides. The comparison of these two strains (K-9 and 204) revealed that K. pneumoniae strain K-9 possessed greater hemolytic activity.

L25 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2003:42027 HCAPLUS
DOCUMENT NUMBER: 138:83341
TITLE: Methods of using electron active compounds for managing conditions afflicting mammals
INVENTOR(S): Antelman, Marvin S.
PATENT ASSIGNEE(S): Marantech Holding, LCC, Israel
SOURCE: PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003003809	A2	20030116	WO 2002-US21232	20020703

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-302656P P 20010705
AB The present invention relates to a method of preventing, treating, or managing a condition of an animal, such as a mammal. Preferably, the animal is a domesticated mammal, such as livestock, cattle, or dairy producing cattle. Conditions suitable for treatment include Actinobacillosis, Anaplasmosis, Bovine babesiosis, Bovine ephemeral fever (BEF), Bovine brucellosis, Boophilus microplus, hemorrhagic septicemia (HS), Contagious bovine pleuropneumonia (CBPP), Rinderpest, Bovine tuberculosis (bovine TB), calf diphtheria, foot-and-mouth disease, bovine respiratory disease, feline immunodeficiency virus, feline leukemia, and cancer. The animal is administered with a therapeutically effective amt. of at least one electron active compd., or a pharmaceutically acceptable deriv. thereof, that has at least two polyvalent cations, at least one of which has a first valence state and at least one of which has a second different valence state, to prevent, treat, or manage the condition, or a symptom thereof. A multivalent metal oxide, such as Ag(I,III), Cu(I,III), Pr(III,IV), and Bi(III, V) oxides or a pharmaceutically acceptable deriv. thereof, may be administered to the animal in an amt. and for a period of time which is therapeutically effective to prevent, treat, and/or manage such a condition(s) afflicting the animal.

L25 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:754477 HCAPLUS
DOCUMENT NUMBER: 137:280488
TITLE: Non-silicone rubber compositions and vulcanized rubber articles containing silver-based antimicrobial agents
INVENTOR(S): Lever, John G.; Haas, Geoffrey R.; Patel, Bhawan; Burke, William O., III; Kerr, Robert C.
PATENT ASSIGNEE(S): Milliken & Company, USA
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002077095	A2	20021003	WO 2002-US6422	20020301
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 6448306	B1	20020910	US 2001-815637	20010323
US 6455610	B1	20020924	US 2001-815730	20010323
US 2003008937	A1	20030109	US 2001-815483	20010326

PRIORITY APPLN. INFO.: US 2001-815637 A 20010323
US 2001-815730 A 20010323
US 2001-815483 A 20010326

AB A pre-vulcanized rubber formulation comprises at least one rubber constituent the majority of which is not a silicone rubber, at least one silver-based antimicrobial compd., and at least one curing agent, where sulfur-based curing agents, if present, are in appreciably low amts. within the formulation. The formulation optionally comprises at least one blowing agent, at least one silver ion control release additive, and at least one antifungal additive other than the silver-based antimicrobial compd. The curing agents used in the formulations are peroxides, preferably org. peroxides, that permit vulcanization and do not irreversibly bind silver ions, resulting in long-term antimicrobial performance of articles produced from these compns. The formulations may also comprise fillers and plasticizers to provide desired characteristics of dimensional stability, stiffness, flexural modulus, tensile strength, abrasion resistance and elongation for the rubber articles, while simultaneously enhancing the control of the antimicrobial action in the rubber articles. Thus, a formulation was prepd. which comprised Nordel IP-type EPDM rubber, carbon black filler (100), paraffin oil (50), org. peroxides (8 phr) and Alphasan as a silver-based antimicrobial agent (2%). The antimicrobial action of these formulations against Staphylococcus aureus and **Klebsiella** pneumoniae was tested.

L25 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:425894 HCAPLUS
DOCUMENT NUMBER: 137:345401
TITLE: Antiviral Tetrasilver Tetroxide therapy
AUTHOR(S): Antelman, Marvin S.
CORPORATE SOURCE: Antelman Technologies, Rehovot, POB 382, Israel
SOURCE: Precious Metals (2001), 25th, 15-21
CODEN: PRCMEU; ISSN: 8756-0917
PUBLISHER: International Precious Metals Institute
DOCUMENT TYPE: Journal; General Review; (computer optical disk)
LANGUAGE: English

AB A review. Clin. results are presented detailing the efficacy of Tetrasilver Tetroxide in curing AIDS etiol. subgroups. The first clin. study involved ten terminal patients belonging to two subgroups: i.e. five each having wasting syndrome and candidiasis. The second clin. study involved thirty non terminal patients (ten in each category) of the aforementioned etiol. groups and p. carinii **pneumonia**. AIDS was cured in all 40 patients, despite the fact that two terminal patients died from irreversible damage. The author was awarded US Patent 5,676,977

(1997) entitled METHOD OF CURING AIDS WITH TETRASILVER TETROXIDE Mol. CRYSTAL DEVICES. Clin. results are also presented involving patients afflicted with viral infections related to the herpes family.
REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:919916 HCAPLUS
DOCUMENT NUMBER: 136:196849
TITLE: **Antimicrobial** and hemostatic effects of **silver-containing** poly(acrylic acid) derivatives
AUTHOR(S): Voronkov, M. G.; Kogan, A. S.; Antonik, L. M.; Lopyrev, V. A.; Fadeeva, T. V.; Marchenko, V. I.; Abzaeva, K. A.
CORPORATE SOURCE: Institute of Organic Chemistry, Siberian Division, Russian Academy of Sciences, Irkutsk, Russia
SOURCE: Pharmaceutical Chemistry Journal (Translation of Khimiko-Farmatsevticheskii Zhurnal) (2001), 35(5), 252-253
CODEN: PCJOAU; ISSN: 0091-150X
PUBLISHER: Kluwer Academic/Consultants Bureau
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A series of **silver-contg.** poly(acrylic acid) (PAA) derivs. were synthesized to develop a drug combining high **antimicrobial** and hemostatic efficiency. The complex, contg. 4 to 10% silver and conventionally called argacryl, has an IR spectra identical to those of feracryl. The **antibacterial** and hemostatic effects of argacryl were studied in comparison to the analogous properties of the PAA matrix and feracryl. The study of the **antimicrobial** activity showed that PAA and feracryl virtually do not inhibit the growth of microorganisms. In contrast, a 1% argacryl soln. fully inhibited the growth of Pseudomonas aeruginosa, Escherichia coli 25922, Bacillus cereus, Proteus mirabilis and Staphylococcus epidermis. The **antimicrobial** activity of argacryl was found to increase with the silver content. Investigation of natural blood hemostasis showed that the control samples cease to coagulate under deficient coagulation factor, excess anticoagulant conditions, and high fibrinolysis conditions. In the presence of inosinase, the coagulation rate dropped two to three times. The addn. of a 1% soln. of PAA and/or feracryl results in blood coagulation irresp. of the iron content in the polymer. This indicates that PAA produces a rather strong hemostatic effect by itself, which increases with the mol. wt.
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:735387 HCAPLUS
DOCUMENT NUMBER: 135:294008
TITLE: Antibody-coated adsorbents, column system having the adsorbents for hemodialysis or plasmapheresis, and therapy using the system
INVENTOR(S): Dunzendorfer, Udo
PATENT ASSIGNEE(S): Germany
SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 2001276217	A2	20011009	JP 2000-102606	20000404

PRIORITY APPLN. INFO.: JP 2000-102606 20000404

AB The adsorbents, useful for removing pathogenic factors from plasma or tissues, are coated with antibodies to TNF, TNF metabolites, TNF transport proteins, or TNF fragments. The adsorbents may be addnl. coated with monoclonal or polyclonal antibodies to pathogenic factors such as cold agglutinins, HLA antigens, hepatitis virus antigens, .beta.2-microglobulins, **bacterial** toxins, etc. A column system having the adsorbents and clin. use of the system are also claimed. Selective removal of these pathogens, antigens, proteins, etc. leaves all normal plasma components unchanged and obviates the need for supplementation of the plasma with these components. Suitable substrates include polymers, polymer-coated **metals**, **glass**, cellulose, agar, Sepharose, etc. Thus, dextran sulfate-induced colitis was successfully treated by plasmapheresis coupled with adsorbents coated with anti-TNF-.alpha. antibody. Addnl. coating of the adsorbents with anti-protein A antibody enhances the effect.

L25 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:597171 HCAPLUS
DOCUMENT NUMBER: 135:322262
TITLE: The removal of bacteria by modified natural zeolites
AUTHOR(S): Milan, Z.; De Las Pozas, C.; Cruz, M.; Borja, R.; Sanchez, E.; Ilangovan, K.; Espinosa, Y.; Luna, B.
CORPORATE SOURCE: Departamento de Estudios sobre Contaminacion Ambiental (DECA), Centro Nacional de Investigaciones Cientificas (CNIC), Havana, Cuba
SOURCE: Journal of Environmental Science and Health, Part A: Toxic/Hazardous Substances & Environmental Engineering (2001), A36(6), 1073-1087
CODEN: JATEF9; ISSN: 1093-4529
PUBLISHER: Marcel Dekker, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The removal effect of natural and modified **zeolites** contg. different heavy **metals** (Ni2+, Zn2+, Fe3+ and Cu2+) on pure cultures of Escherichia coli and Staphylococcus aureus in a solid medium was evaluated. These expts. were carried out in a continuous mode treating municipal wastewater. Fecal coliform species and Pseudomonas aeruginosa were identified. The rate consts. of heavy **metal** lixiviation were detd. using a 1st-order kinetic model. The removal effect of modified natural **zeolites** in both a solid medium and in continuous mode showed an increased elimination of the **bacterial** population. The results established a decreasing order of the removal effect as follows: Cu2+ > Fe3+ > Zn2+ > Ni2+. The best performance of columns was obtained for inlet **bacterial** concns. <106 cells/100 mL. Most of the identified **bacterial** species were affected by Cu modified **zeolites**, although Serratia marcescens presented the highest sensitivity and **Klebsiella** pneumoniae the greatest resistance.

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1989:520953 HCAPLUS
DOCUMENT NUMBER: 111:120953
TITLE: Bactericidal compositions comprising finely divided silver particles on clay and a method for their preparation
INVENTOR(S): De Cuellar, Blanca Rose A.; Bello, Luis Armando L.
PATENT ASSIGNEE(S): Laboratorios Biochemie de Mexico S. A. de C. V., Mex.
SOURCE: U.S., 11 pp. Cont.-in-part of U.S. Ser. No. 810,524,

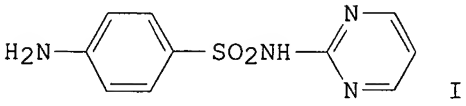
abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4828832	A	19890509	US 1987-18760	19870226

PRIORITY APPLN. INFO.: US 1983-530112 19830907
US 1985-810524 19851216

AB A method for prepg. a bactericidal compn. contg. finely divided Ag particles on clay comprises the prepn. of a wet homogeneous mixt. of an Ag soln., clay, and C powder, calcining the mixt. to produce finely divided Ag particles in the clay (Ag particles constitute >3% by wt. of the dispersion), and cooling and grinding the dispersion thus formed. The reaction of AgNO3 in the presence of C produces CO2, NO2, and Ag. Pharmaceuticals had the form of an aerosol which was applied to humans affected with surgical wounds infected by Salmonella, **Klebsiella** aerobacter, Proteus mirabilis, Staphylococci, Escherichia coli. All patients recovered satisfactorily; wounds treated with furcin, benzal, oxygenated water, merthiolate, Lassar paste, bacitracin or kanamycin did not show a faster rate of healing.

L25 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1976:100073 HCAPLUS
DOCUMENT NUMBER: 84:100073
TITLE: Antimicrobial activity of silver sulfadiazine
AUTHOR(S): Orpianesi, C.
CORPORATE SOURCE: Ist. Microbiol., Univ. Camerino, Camerino, Italy
SOURCE: Nuovi Annali d'Igiene e Microbiologia (1975), 26(1), 64-8
CODEN: NAIMAH; ISSN: 0029-6287
DOCUMENT TYPE: Journal
LANGUAGE: Italian
GI



I

AB Ag sulfadiazine (I) [22199-08-2] had significant and quant. similar **antimicrobial** activity in vitro against 3 strains of Candida albicans and 37 strains of gram-pos. and -neg. **bacteria** (including Bacillus species, Sarcina lutea, Staphylococcus aureus, Salmonella species, Pseudomonas aeruginosa, Escherichia coli, Proteus species, Shigella species, and **Klebsiella** pneumoniae). The min. inhibitory concns. ranged 0.78-12.5 .mu.g/ml. Because the sensitivities of the various species were so similar (including C. albicans, which is generally insensitive to sulfonamides) and because the degree of sensitivity was similar to that obtained with other **Ag-contg.** compds., it is probable that the active moiety of I is the Ag atom rather than the sulfonamide portion. I, which is water-insol., was prepd. for these tests by initial dissoln. in human serum, followed by diln. with 10% glucose soln.

L25 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1970:125032 HCAPLUS

DOCUMENT NUMBER: 72:125032
TITLE: Stability of the properties of preparations No. 3 and 14
AUTHOR(S): Rybas, I. I.
CORPORATE SOURCE: USSR
SOURCE: Antibiotiki (Kiev) (1969), No. 4, 18-21
CODEN: ANBKAQ; ISSN: 0301-5408
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB The stability of (n-C9H19O2CCH2N+Me2)2(CH2)7 2Cl- (prepn. 3), a nd (n-C9H19O2CCH2NMe2)2(CH2)6 (prepn. 14) were investigated afte r preservation in dry place, and hermetically sealed for 1 year. Once a month they were tested in 1:1000 dilns., in distd. H2O at pH 7, exposed to light at 18-20.degree. and at 6.degree.. Cultures Staphylococcus aureus 209, Escherichia coli, **Klebsiella** frie dlanderi, Bacillus subtilis, Proteus vulgaris, and **Bacterium** [Bacill us] anthracis (vaccine STI) were employed. Prepns. 3, and 14 in dry state preserved the **antibacterial** activity for 1 year; in 1:1000 diln. at room temp., for 1 month and 6.degree. up to 7 months. At pH 6 and lower, and pH 9 and higher the prepn. solns. inactivated immediately. Dilns. not more than 1:40.000 showed hemolytic action. Both prepns. can be used for **disinfection** of **glass**, wooden, and **metal** articles, and tissues infected with staphylococci.

```
=> d stat que
L1        21687 SEA FILE=HCAPLUS ABB=ON  PLU=ON  PNEUMONIA OR KLEBSIELLA
L4            3 SEA FILE=REGISTRY ABB=ON  PLU=ON  SOL(W)GEL OR SOLGEL?
L5        36498 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L4 OR SOL(W)GEL OR SOLGEL?
L6            9 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 AND L5
L12           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 AND LOG(W)KILL
L13           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L12 NOT L6
L14         328 SEA FILE=HCAPLUS ABB=ON  PLU=ON  KILL(5A)RATE
L15          15 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L14 AND L1
L16          14 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L15 NOT (L6 OR L13)
L19          26 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 AND ((BASIC OR LOW)(W)PH
                OR CAUSTIC)
L20           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L19 AND HEAT) NOT (L6 OR
                L13)
L21      180549 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (METAL OR SILVER OR AG)(W)(CON
                TAIN? OR OXIDE) OR METAL(L)(GLASS? OR SULFADIAZINE OR ZEOLITE?)

L22      180549 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L21 OR (METAL OR SILVER OR
                AG)(W)(CONTAIN? OR OXIDE) OR METAL(L)(GLASS? OR SULFADIAZINE
                OR ZEOLITE?)
L23        2327 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L22(L)(?MICROB? OR ?BACTE? OR
                DISINFEC?)
L24          12 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L23 AND L1
L25          10 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L24 NOT (L6 OR L13 OR L16 OR
                L20)
L26          22 SEA FILE=REGISTRY ABB=ON  PLU=ON  TMOS OR TEOS OR ALUMINUM
                ACETYLACETONATE/CN OR TITANIUM ACETYLACETONATE/CN OR ZIRCONIUM
                ACETYLACETONATE/CN
L27       24559 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L26 OR TMOS OR TEOS OR
                (ALUMINUM  OR TITANIUM OR ZIRCONIUM)(W) ACETYLACETONATE
L31        2255 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L27(L)(HOST OR PRECURSOR)
L32         108 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L27(L)(?MICROB? OR ?BACTE? OR
                DISINFEC?)
L33           3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L31 AND L32
L34           3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L33 NOT (L6 OR L13 OR L16 OR
                L20 OR L25)


=>
=>

=> d ibib abs hitrn l34 1-3

L34  ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2002:249512  HCAPLUS
DOCUMENT NUMBER:          137:36390
TITLE:                    RBS and HIRBS studies of nanostructured AgSiO2 sol-gel
                          thin coatings
AUTHOR(S):                Kokkoris, M.; Trapalis, C. C.; Kossionides, S.;
                          Vlastou, R.; Nsouli, B.; Grotzschel, R.; Spartalis,
                          S.; Kordas, G.; Paradellis, Th.
CORPORATE SOURCE:         Institute of Nuclear Physics, Laboratory for Material
                          Analysis, NCSR 'Demokritos', Aghia Paraskevi, Athens,
                          GR-153 10, Greece
SOURCE:                   Nuclear Instruments & Methods in Physics Research,
                          Section B: Beam Interactions with Materials and Atoms
                          (2002), 188, 67-72
                          CODEN: NIMBEU; ISSN: 0168-583X
PUBLISHER:                Elsevier Science B.V.
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
AB   In the present work, composite AgSiO2 thin coatings, contg. metal
```

nanoparticles, were prepd. on glass substrates by the sol-gel route. The coatings were thermally treated in oxidative and reductive conditions up to 500.degree.C for metal nanoparticle formation. The coating structure and the nanoparticle formation were studied by at. force microscopy and Rutherford backscattering spectroscopy (RBS) techniques. In the case of RBS, 1.4 MeV 4He+ ions were used for all samples, and low energy 16O and 12C ions in selected ones (heavy ion RBS, HIRBS), to improve the depth resoln. for the profiling of the metal component. The antibacterial activity against Escherichia coli is examd. by antibacterial drop test. The coatings exhibited a high antibacterial activity, which was enhanced with the increase of the metal concn. and was reduced with the increase of the particle size of the metal nanoparticles. The possible correlation between the layer interdiffusion after the thermal treatment and the antibacterial activity is examd. and analyzed. Although further studies are required, RBS and HIRBS seem to be excellent tools for the quality control in the prodn. of sol-gel thin coatings.

IT **78-10-4, Teos**
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)
(**precursor**; sol-gel prepn. and **antibacterial** activity against Escherichia coli of nanostructured Ag-SiO2 nanocomposite coatings)

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:392945 HCAPLUS
DOCUMENT NUMBER: 131:40955
TITLE: Controlled-release compositions containing agricultural pesticide, microbicide or antifouling agent incorporated into metal oxide glass
INVENTOR(S): Ghosh, Tirthankar; Nungesser, Edwin Hugh
PATENT ASSIGNEE(S): Rohm and Haas Company, USA
SOURCE: Eur. Pat. Appl., 18 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 922386	A2	19990616	EP 1998-309692	19981125
EP 922386	A3	20000126		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6090399	A	20000718	US 1998-189479	19981110
AU 9895159	A1	19990701	AU 1998-95159	19981201
SG 71879	A1	20000418	SG 1998-5360	19981208
BR 9805326	A	20000314	BR 1998-5326	19981209
JP 11263702	A2	19990928	JP 1998-352346	19981211
CN 1232610	A	19991027	CN 1998-123093	19981211

PRIORITY APPLN. INFO.: US 1997-69243P P 19971211

AB Disclosed are controlled-release compns. contg. biol. active compds. incorporated into metal oxide glass having a porous matrix which is prepd. by polymg. one or more metal alkoxide monomers, optionally in the presence of a second metal alkoxide monomer. These compns. may be directly incorporated into the locus to be protected or may be applied to a structure in a coating. Thus, tetraethoxy orthosilicate and methyltriethoxy orthosilicate (mole ratio 4:1), 4,5-dichloro-2-n-octyl-3-isothiazolone (5% by wt. of the final product), and water (mole ratio of alkoxide monomers to water 1:2) were combined in a flask and homogenized by adding methanol or ethanol while stirring; then, 8-10 g of 0.01N HCl

per mol of metal alkoxide monomer was added to the reaction mixt., which was allowed to polymerize at room temp. for 3-60 days to give a solid organometallic oxide glass contg. the biol. active compd. The cumulative percentages of 4,5-dichloro-2-n-octyl-3-isothiazolone released were 5, 30, 41, 50 and 64% by wt. in 0, 0.5, 2, 31, and 144 h.

IT **78-10-4 681-84-5**
RL: AGR (Agricultural use); BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
(**precursor**; controlled-release compns. contg. agricultural pesticide, **microbicide** or antifouling agent incorporated into metal oxide glass)

L34 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:787747 HCAPLUS
DOCUMENT NUMBER: 128:24023
TITLE: Manufacture of antibacteria dry colorants and their resin moldings
INVENTOR(S): Nakamura, Ichio; Tomioka, Toshiichi; Miyaji, Toshiaki
PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09316355	A2	19971209	JP 1996-135213	19960529

PRIORITY APPLN. INFO.: JP 1996-135213 19960529

AB Title colorants are prepd. by mixing dispersant (A)-coated pigments (B) particles into antibacteria particles (C) at a preferred concn. ratio of A 0.1-0.3, B 0.1-0.4, and C 0.3-0.7 part. Mixing Al stearate-coated TiO2 particles with silica gel-supported Ag thiosulfate complex particles gave a title colorant, 1 part of which (initially prepd. or after 6 days at 40.degree. and 95% relative humidity) was well dispersed in 100 parts ABS resin and injection molded to form a test piece with good antibacteria ability and discoloration prevention.

IT **78-10-4**, Tetraethoxysilane
RL: RCT (Reactant); RACT (Reactant or reagent)
(silica **precursors**; manuf. of storage-stable **bactericidal** colorants for resin moldings)

=> d stat que

L1	21687	SEA FILE=HCAPLUS ABB=ON PLU=ON PNEUMONIA OR KLEBSIELLA
L4	3	SEA FILE=REGISTRY ABB=ON PLU=ON SOL(W)GEL OR SOLGEL?
L5	36498	SEA FILE=HCAPLUS ABB=ON PLU=ON L4 OR SOL(W)GEL OR SOLGEL?
L6	9	SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND L5
L12	2	SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND LOG(W)KILL
L13	2	SEA FILE=HCAPLUS ABB=ON PLU=ON L12 NOT L6
L14	328	SEA FILE=HCAPLUS ABB=ON PLU=ON KILL(5A)RATE
L15	15	SEA FILE=HCAPLUS ABB=ON PLU=ON L14 AND L1
L16	14	SEA FILE=HCAPLUS ABB=ON PLU=ON L15 NOT (L6 OR L13)
L19	26	SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND ((BASIC OR LOW)(W)PH OR CAUSTIC)
L20	2	SEA FILE=HCAPLUS ABB=ON PLU=ON (L19 AND HEAT) NOT (L6 OR L13)
L21	180549	SEA FILE=HCAPLUS ABB=ON PLU=ON (METAL OR SILVER OR AG)(W)(CONTAIN? OR OXIDE) OR METAL(L)(GLASS? OR SULFADIAZINE OR ZEOLITE?)
L22	180549	SEA FILE=HCAPLUS ABB=ON PLU=ON L21 OR (METAL OR SILVER OR

```
                AG)(W)(CONTAIN? OR OXIDE) OR METAL(L)(GLASS? OR SULFADIAZINE
                OR ZEOLITE?)
L23         2327 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L22(L)(?MICROB? OR ?BACTE? OR
                DISINFEC?)
L24           12 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L23 AND L1
L25           10 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L24 NOT (L6 OR L13 OR L16 OR
                L20)
L26           22 SEA FILE=REGISTRY ABB=ON  PLU=ON  TMOS OR TEOS OR ALUMINUM
                ACETYLACETONATE/CN OR TITANIUM ACETYLACETONATE/CN OR ZIRCONIUM
                ACETYLACETONATE/CN
L27        24559 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L26 OR TMOS OR TEOS OR
                (ALUMINUM  OR TITANIUM OR ZIRCONIUM)(W) ACETYLACETONATE
L31         2255 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L27(L)(HOST OR PRECURSOR)
L32          108 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L27(L)(?MICROB? OR ?BACTE? OR
                DISINFEC?)
L33            3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L31 AND L32
L34            3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L33 NOT (L6 OR L13 OR L16 OR
                L20 OR L25)
L37          148 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L27 AND ?BACTER?
L38            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L37 AND L31
L39            2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L38 NOT (L6 OR L13 OR L16 OR
                L20 OR L25 OR L34)

=>
=>

=> d ibib abs hitrn l39 1-2

L39  ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2002:946388  HCAPLUS
DOCUMENT NUMBER:          138:25880
TITLE:                    System for releasing active substances and active
                          agents manufactured by the sol-gel process
INVENTOR(S):              Dreja, Michael; Von Rybinski, Wolfgang
PATENT ASSIGNEE(S):       Henkel Kommanditgesellschaft auf Aktien, Germany
SOURCE:                   PCT Int. Appl., 28 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 German
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
     WO 2002098998      A1   20021212       WO 2002-EP5752   20020524
         W:  AU, BG, BR, BY, CA, CN, CZ, DZ, HU, ID, IL, IN, JP, KR, MX, NO,
             NZ, PL, RO, RU, SG, SI, SK, UA, US, UZ, VN, YU, ZA
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, TR
     DE 10126966        A1   20021212       DE 2001-10126966 20010601
PRIORITY APPLN. INFO.:                   DE 2001-10126966 A  20010601
OTHER SOURCE(S):          MARPAT 138:25880
AB   The invention relates to a method for producing a compn., which contains
     an active substance or an active agent and is particularly suitable for
     producing films, protective layers, coverings or coatings.  According to
     said method, a sol-gel process is carried out in the presence of a
     suitable sol-gel precursor and a carrier mol. charged with at
     least one active substance or active agent.  The compn. produced in this
     manner forms the starting material for producing films, protective layers,
     coverings or coatings with a protective and storage function and with a
     controlled release function for active substances and active agents.
     Thus, a soln. contg. orange oil-loaded hydroxypropyl-substituted
```

.beta.-cyclodextrin 10, water 10, and **TEOS** 27.5 g with pH 1.7 (HCl) was coated on glass and heated 24 h at 60.degree. to give a porous coating with slow release of orange odor.

IT **11099-06-2**, **TEOS** homopolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(coating; coatings and films for releasing active substances and active agents manufd. by sol-gel process)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:915416 HCAPLUS
DOCUMENT NUMBER: 136:9759
TITLE: Optical semiconducting composite ceramic from aqueous slurries containing titania, silica, zinc oxide and silver
INVENTOR(S): Jeon, Hyeong Tag
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2000012172	A	20000306	KR 1999-9735	19990322

PRIORITY APPLN. INFO.: KR 1999-9735 19990322

AB An optical semiconducting composite ceramic is used as **antibacterial** agent, for deodorizing and decompg. contaminants causing air and water pollutions and for transmitting far-IR light or blocking UV rays. The optical semiconducting composite ceramics in aq. slurry form are prepd. by chem. treatment with 50% of TiO2 soln., 40% of SiO2 soln., 9% of ZnO soln. and 1% of silver. The titania soln. (0.057 M) is prepd. from titanium tetraisopropoxide and isopropanol while the 0.44 M SiO2 soln. is prepd. from tetraethoxysilane and isopropanol, and the 0.5 M ZnO soln. is obtained from zinc diacetate.

IT **78-10-4**, Tetraethoxysilane
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)
(**precursor**; optical semiconducting composite ceramic from aq. slurries contg. titania, silica, zinc oxide and silver)